

FIG. 1B

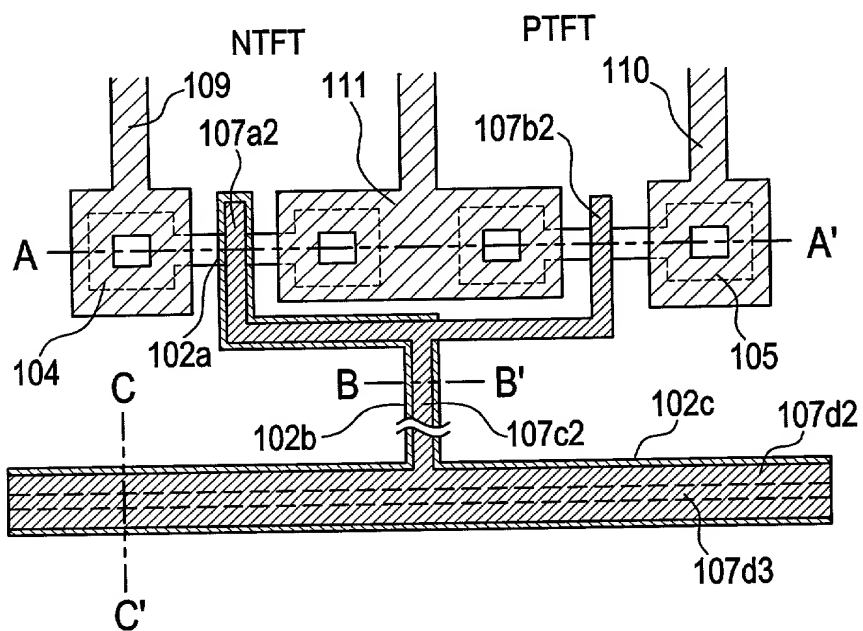


FIG. 2A

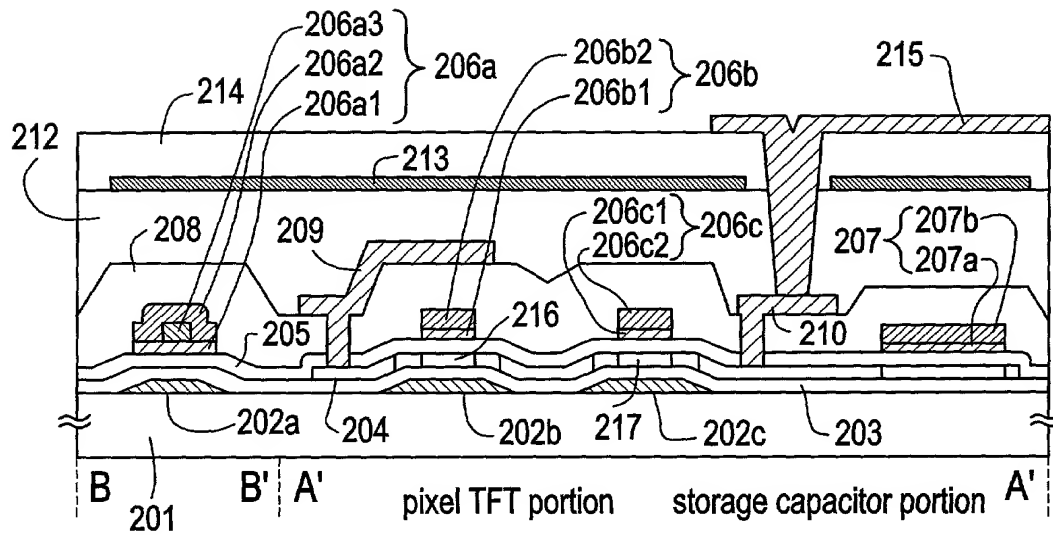


FIG. 2B

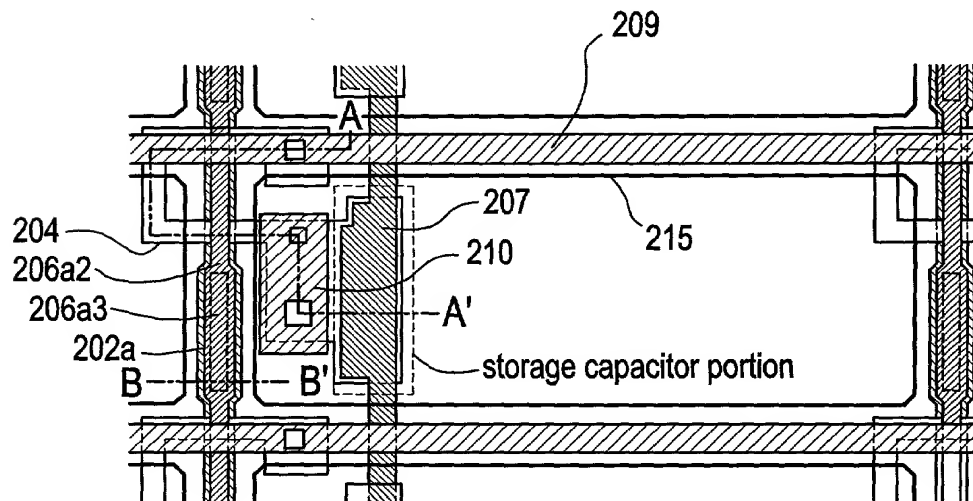


FIG. 3A

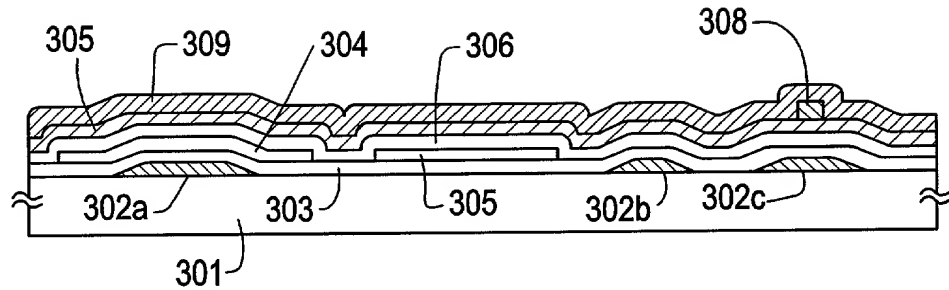


FIG. 3B

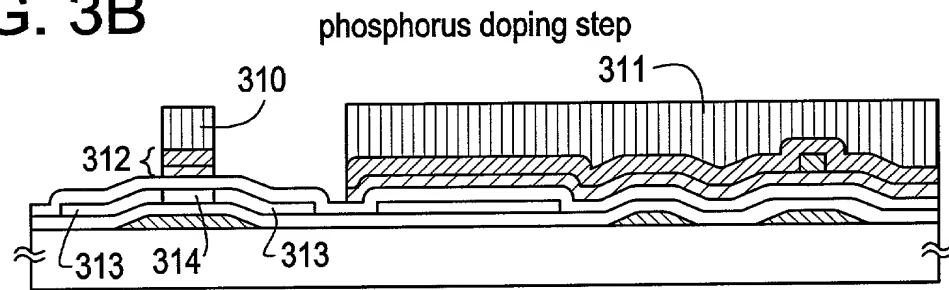


FIG. 3C

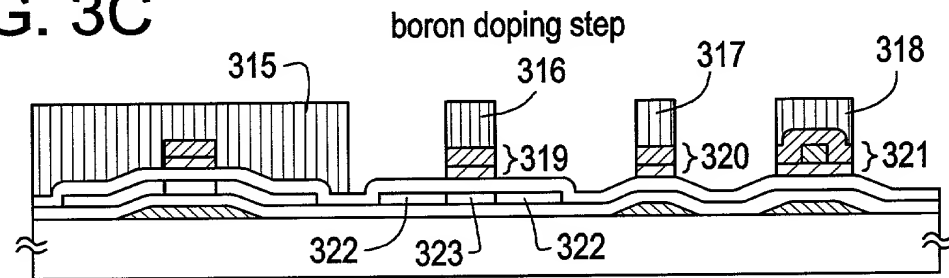


FIG. 3D

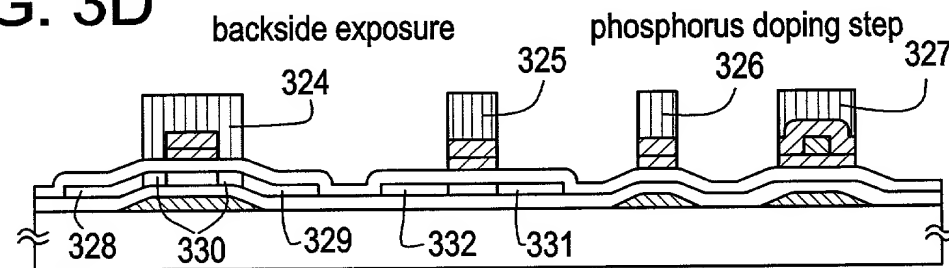


FIG. 3E

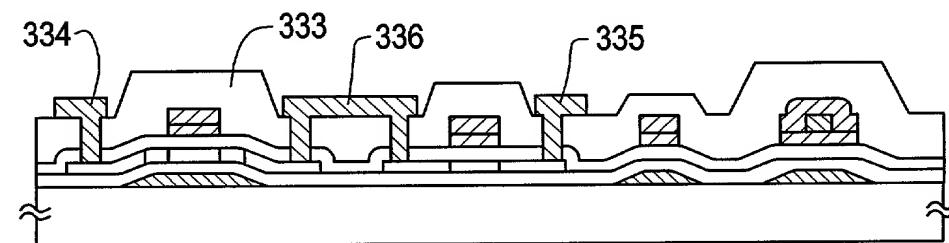


FIG. 4A

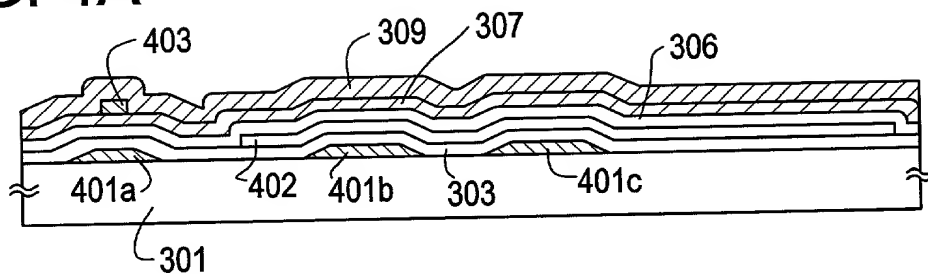


FIG. 4B

phosphorus doping step

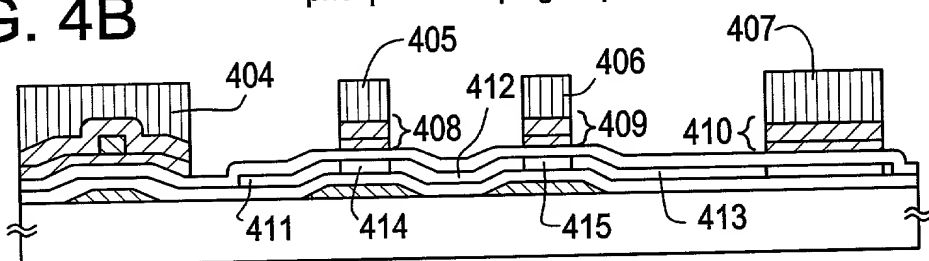


FIG. 4C

boron doping step

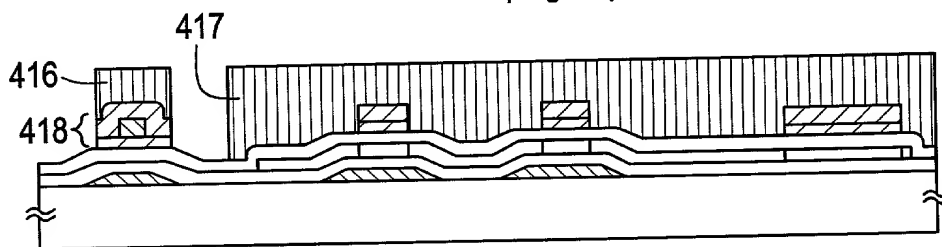


FIG. 4D

backside exposure

phosphorus doping step

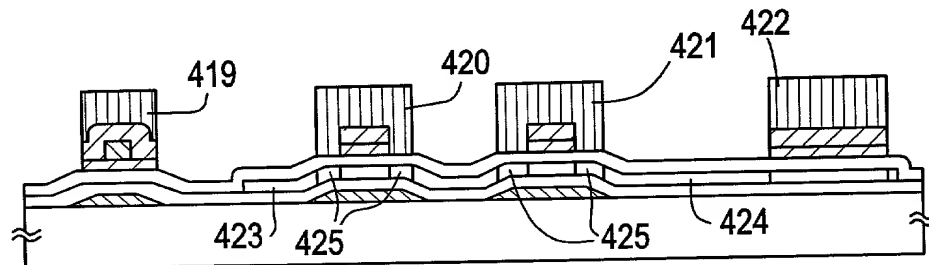


FIG. 4E

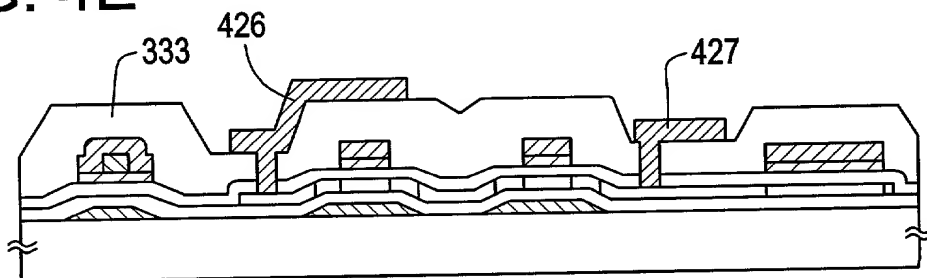


FIG. 5A

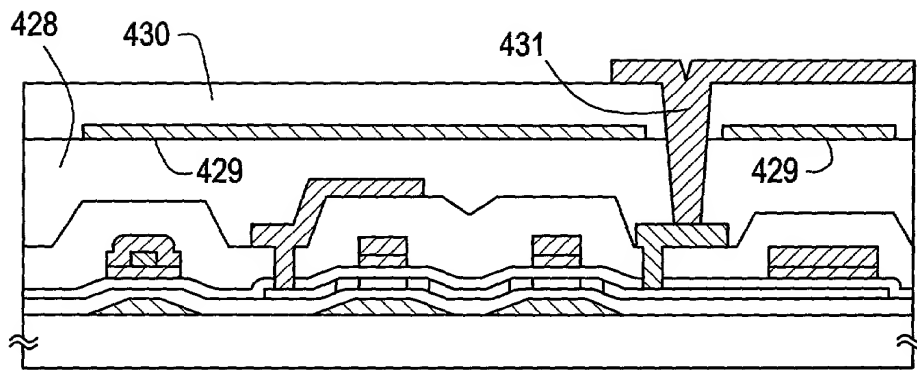


FIG. 5B

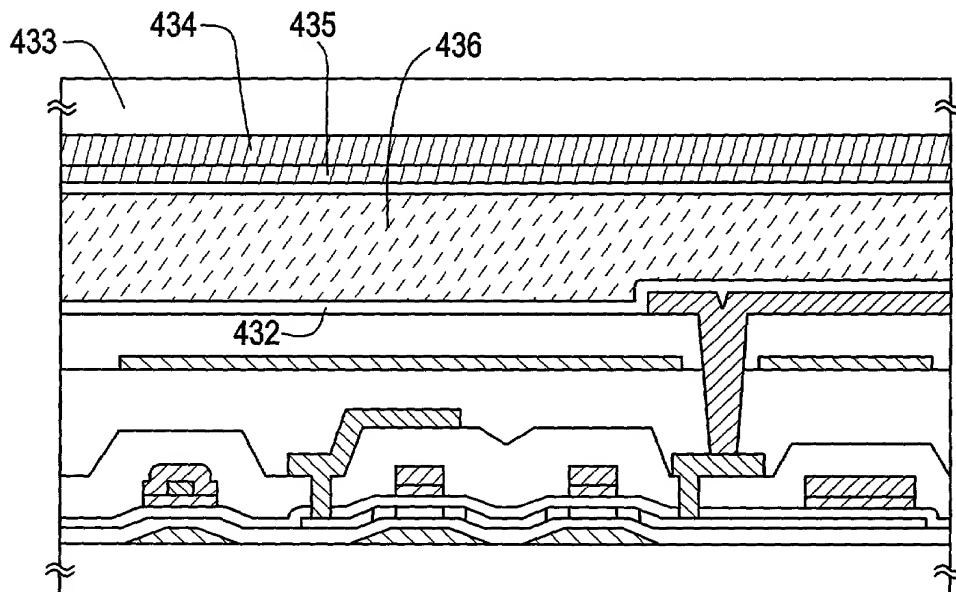


FIG. 6

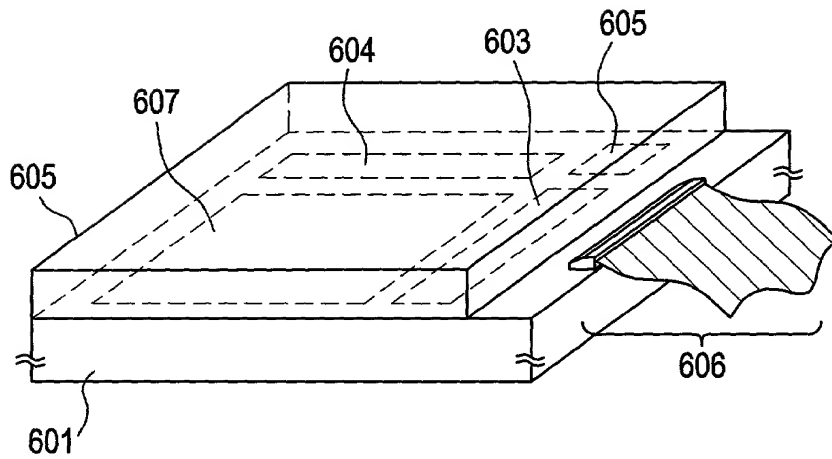


FIG. 7

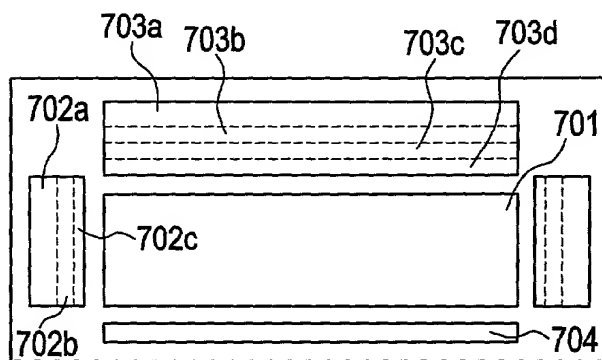


FIG. 8A

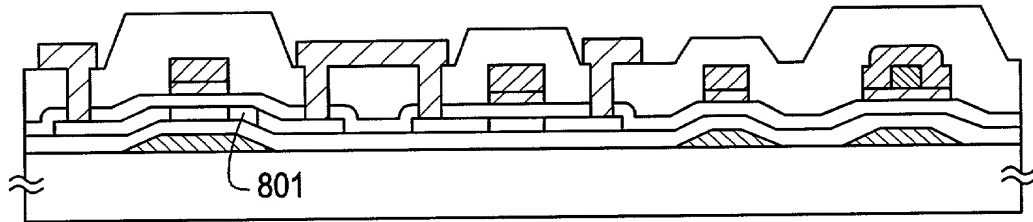


FIG. 8B

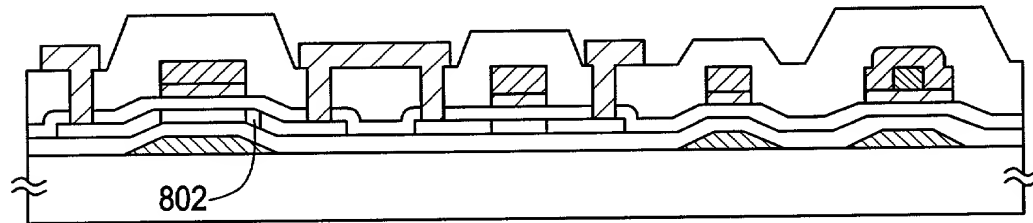


FIG. 8C

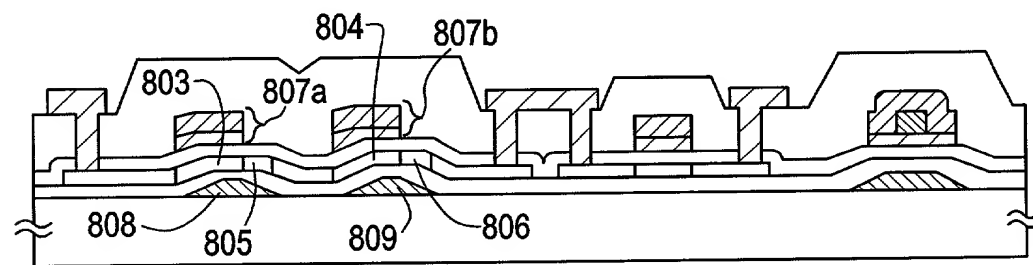


FIG. 8D

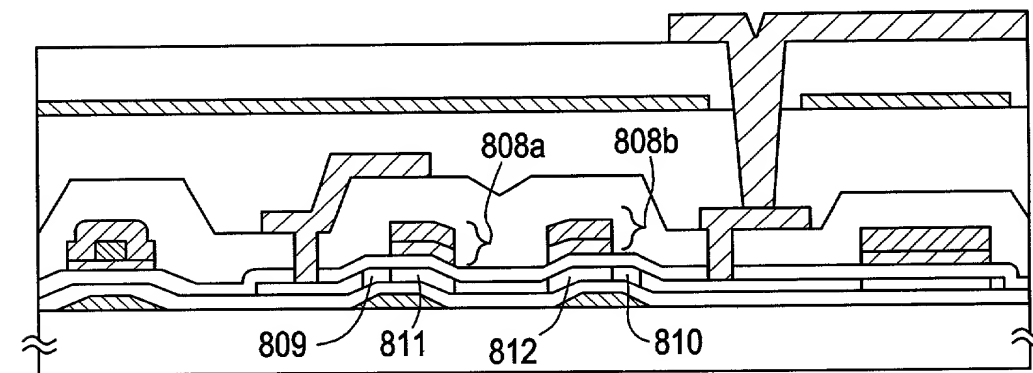
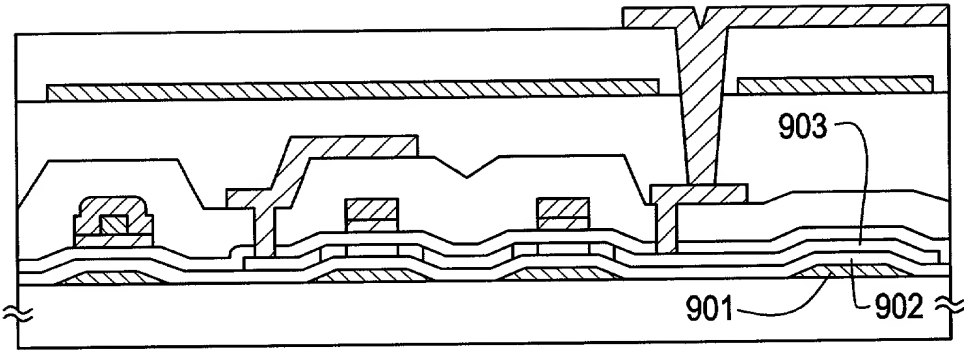
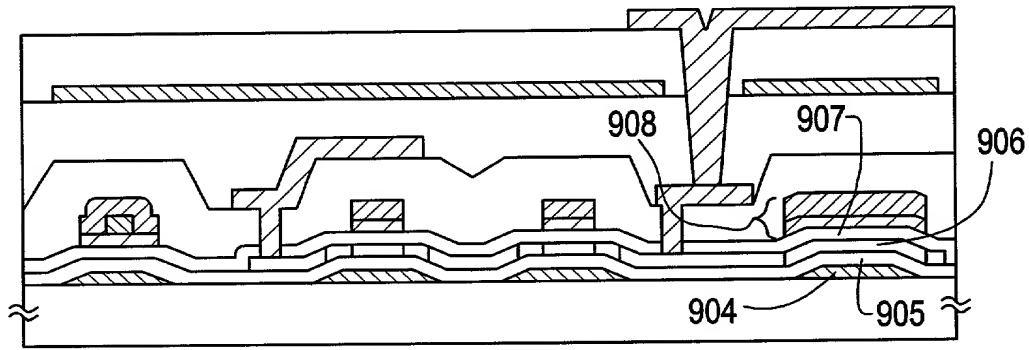


FIG. 9A



pixel TFT portion storage capacitor portion

FIG. 9B



pixel TFT portion storage capacitor portion

FIG. 10A

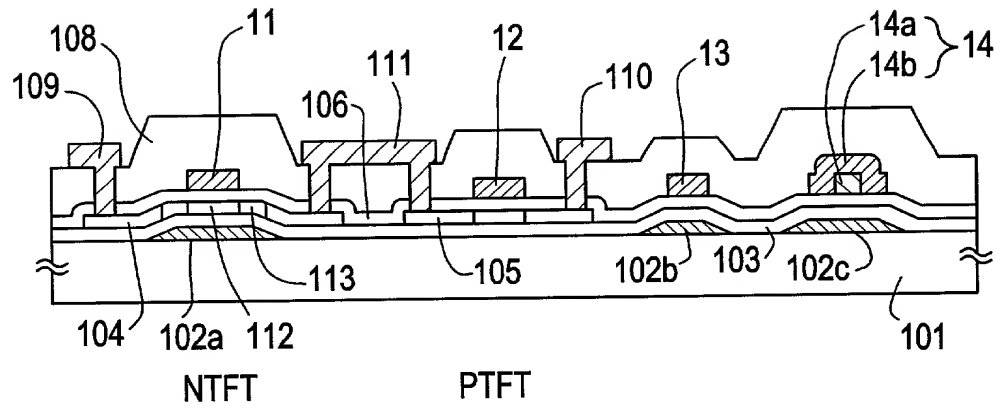


FIG. 10B

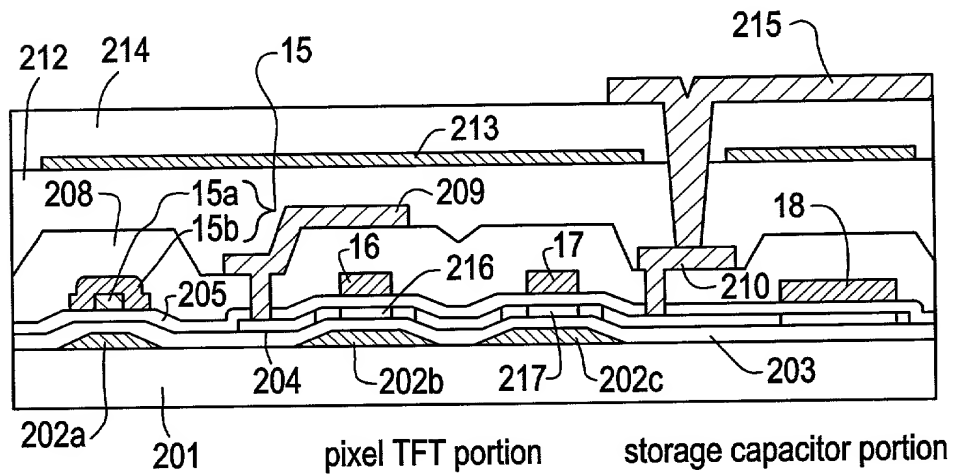


FIG. 11B

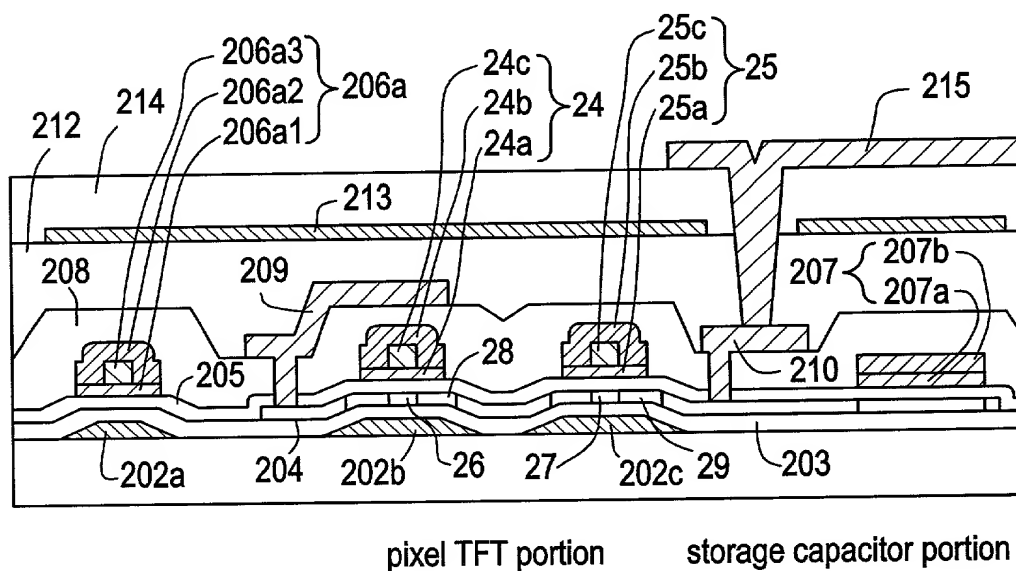
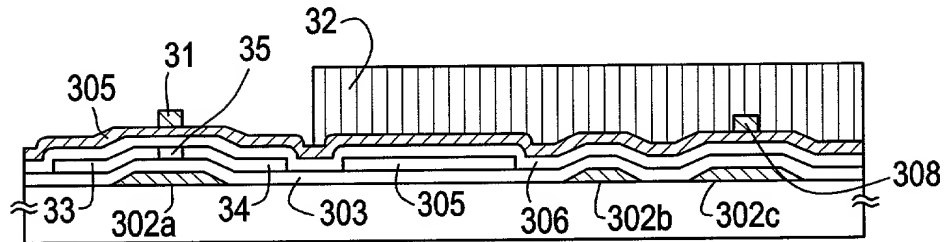
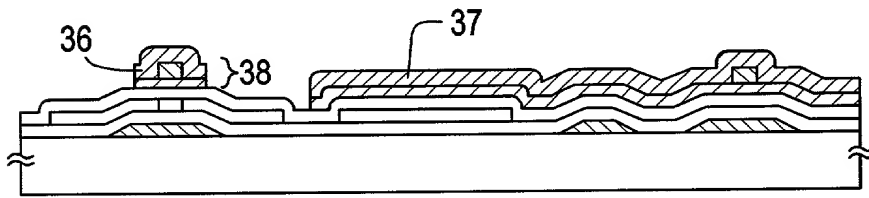
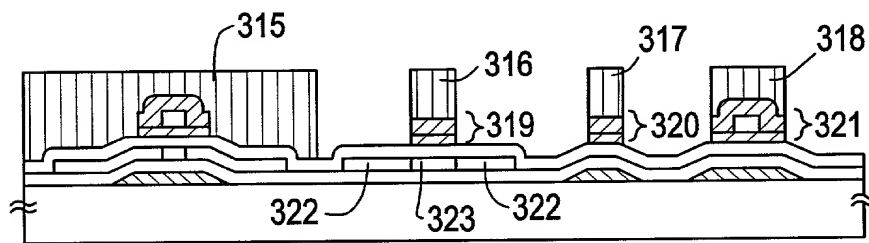


FIG. 12A

gettering step by phosphorus

**FIG. 12B****FIG. 12C**

boron doping step

**FIG. 12D**

back side exposure step

phosphorus doping step

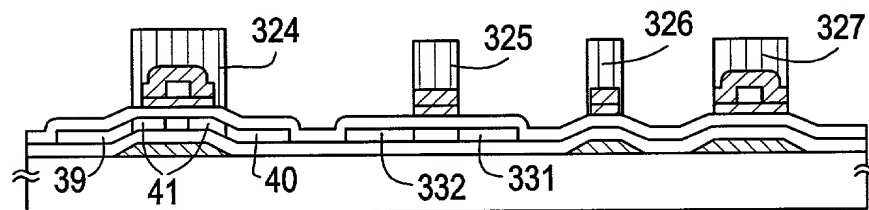


FIG. 13

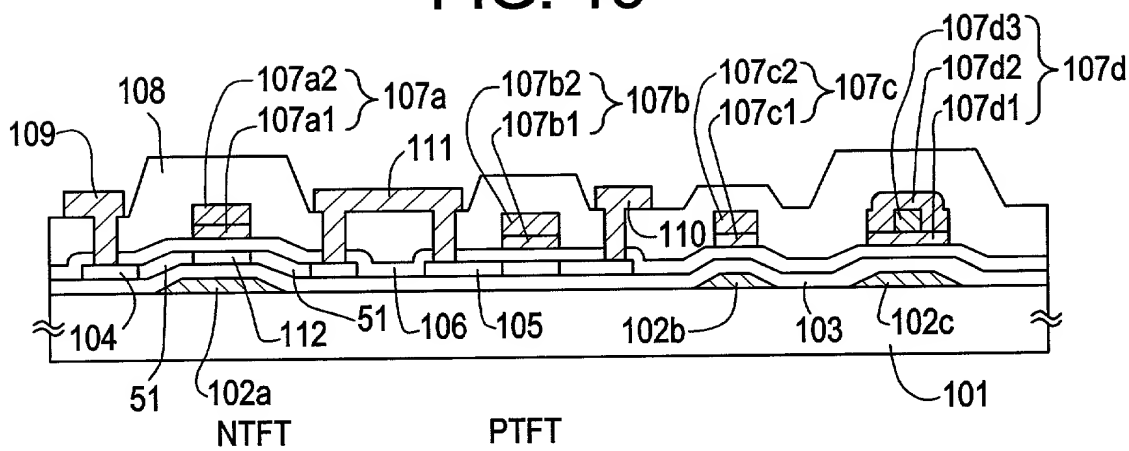


FIG. 14A

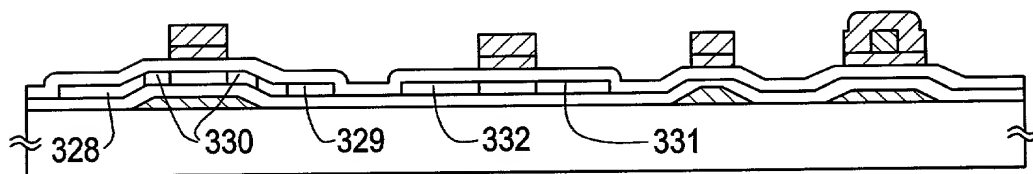


FIG. 14B

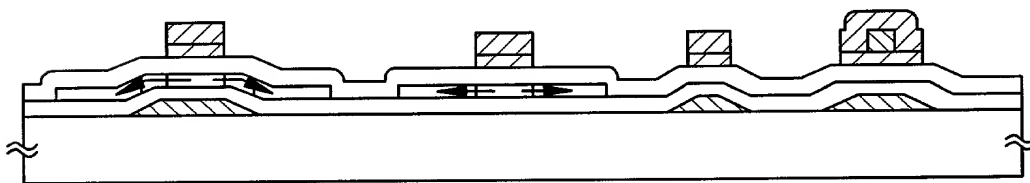


FIG. 15A

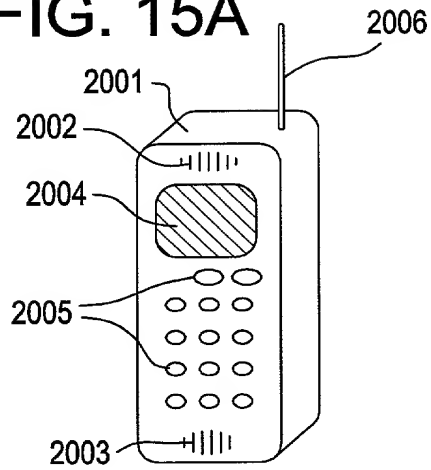


FIG. 15B

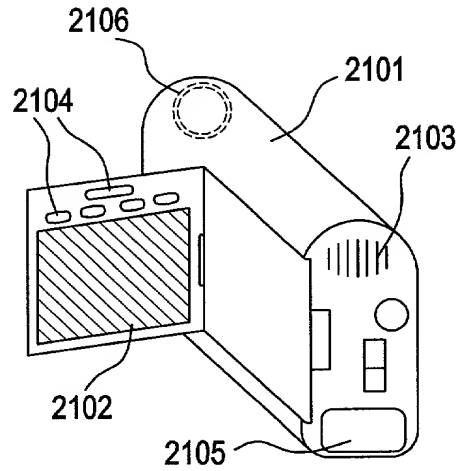


FIG. 15C

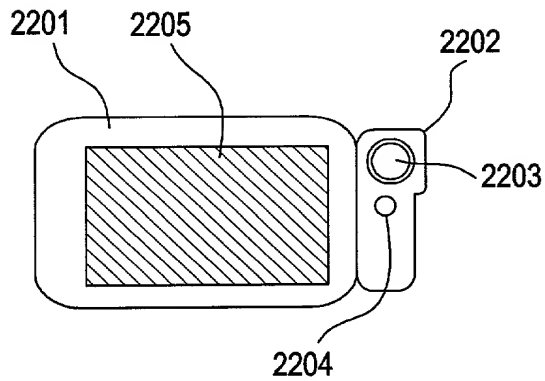


FIG. 15D

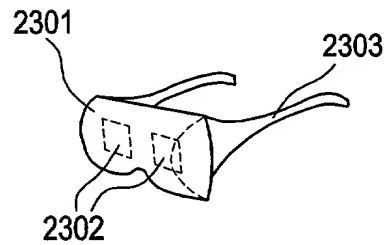


FIG. 15E

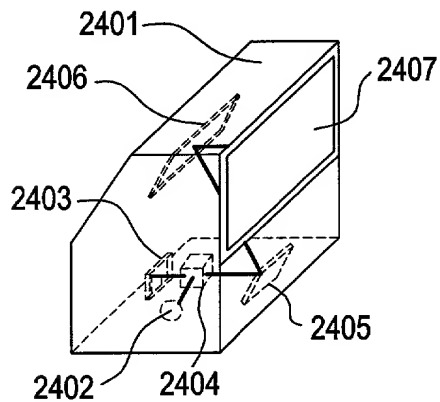


FIG. 15F

